FINDING AND RECOMMENDATION(S)

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Finding: Prescribed Fire

Prescribed Fire must be promoted and increasingly employed in the Lake Tahoe Basin as a fuel reduction tool.

Background and Supporting Evidence:

Prescribed Fire as a forest management tool best mimics the thinning and recycling effects of pre-settlement natural fire, best restores native forest conditions, best protects the forest from catastrophic wildfire, and is often the most cost effective means to reduce naturally-occurring vegetation fuels.

The effects of low to moderate intensity prescribed fires are very beneficial to ecosystem management goals, contrary to the often negative effects of high intensity wildfires. Prescribed burning is a critical tool that can be used to restore and maintain ecosystem components including vegetation, soils, watershed function, aquatic organisms, insects, diseases, and terrestrial animals and their habitats. Prescribed fire effects also protect human elements of life, property and cultural resources from damage by future wildfire, by decreasing surface fuel loading and potential wildfire intensity.

The vegetation and specifically the forests of the Lake Tahoe Basin are both fire-adapted for resiliency and fire-dependant for recycling of nutrients and regeneration of seral species such as Jeffrey pine. Due to the exclusion of natural fire from the ecosystem for over a century, use of fire only during prescribed conditions of fuel moisture, relative humidity, wind speed, etc, can properly restore recycling and regeneration effects, which are now threatened by the risk of catastrophic wildfire during unknown conditions of fuel moisture and atmospheric stability.

Disposal of vegetative debris through sound alternatives to burning such as mechanical removal, chipping, mastication or cut and scatter are not feasible or appropriate on every acre due to constraints of access and negative effects of scattering wood chips or debris including high surface fuel loading, restricted regeneration and nutrient cycling, and detriment to wildlife habitat.

Forest areas in the Western United States treated with prescribed fire have been proven through research to be highly resistant to stand-replacement wildfire and to be very beneficial to native wildlife as part of a landscape with diverse vegetative composition, structure and function.

Current regulations do not allow pile burning in Stream Environment Zone (SEZ). Many SEZs extend well away from physical watercourses, for example into dry meadows and stands of dead and dying lodgepole pines. Protection of water quality could be maintained by allowing active ignition, including pile burning, within SEZ except within a standard width buffer from a watercourse.

Air pollution regulations related to prescribed fire are more complex and restrictive in California than in Nevada within the Lake Tahoe Basin. Implementers of prescribed fire in Nevada use their own professional discretion when deciding when to burn. California "Burn Days" and "No Burn Days" are decided by California Air Resources Board meteorologists in Sacramento and are often very restrictive on the last day of a stable weather pattern, potentially a good window in which to successfully implement prescribed fire. "Success" in prescribed fire always includes smoke management, in addition to safety, effectiveness and other criteria.

Recommendation(s)

1. The California Air Resources Board and local Air Pollution Control Districts should permit more prescribed burning ahead of good dispersal conditions by declaring and permitting more "marginal burn days with improving conditions" the day before the arrival of a weather system. Specifically, a "No Burn Day" under the current criteria, with good dispersal conditions forecasted for the following day, should be declared a permissive burn day on a case by case basis.

Alternatively, continue to declare "No Burn Days" under the current criteria, but allow California implementing agencies in the Lake Tahoe Basin to consider the daily burn day status as information only, and to use their own discretion to decide when to burn, which has proven successful on the Nevada side.

2. Change TRPA and Lahontan regulations to allow active ignition of prescribed fire including pile burning, understory burning and broadcast burning in Stream Environment Zone (SEZ) except within a standard width watercourse buffer equal to State and Federal standards including the Watercourse and Lake Protection Zone (WLPZ) standards of the California Forest Practice Rules.

Impacts of Implementation: *(The implementation of any Recommendation is likely to have specific impacts. Consider potential consequences related to each of the following areas)***:**

Analysis of impacts on the following factors is REQUIRED (Best Estimate):

- ☐ Cost The cost of implementing prescribed fire is generally lower than any alternative fuel reduction treatment.
- ☐ Funding source Funding source will be from the land management agency or outside sources such as grants.
- ☐ Staffing Staffing must be highly trained and qualified to safely and effectively implement prescribed burns.
- ☐ Existing regulations and/or laws Existing regulations and laws should be modified to allow more use of prescribed fire.

Analysis of impacts on the following factors is OPTIONAL:

- ☐ Operational
- ☐ Social Public education must be improved to promote understanding of the benefits of prescribed fire.
- ☐ Political
- ☐ Policy
- ☐ Health and Safety Smoke impacts from prescribed fires are dramatically less than from wildfires. Risk of wildfire is dramatically decreased by a successful prescribed fire program.
- ☐ Environmental Prescribed fire best mimics the effects of pre-settlement natural fires in our fire-dependent ecosystem.
- ☐ Interagency Interagency cooperation and training can be greatly improved through cooperative prescribed burning efforts.